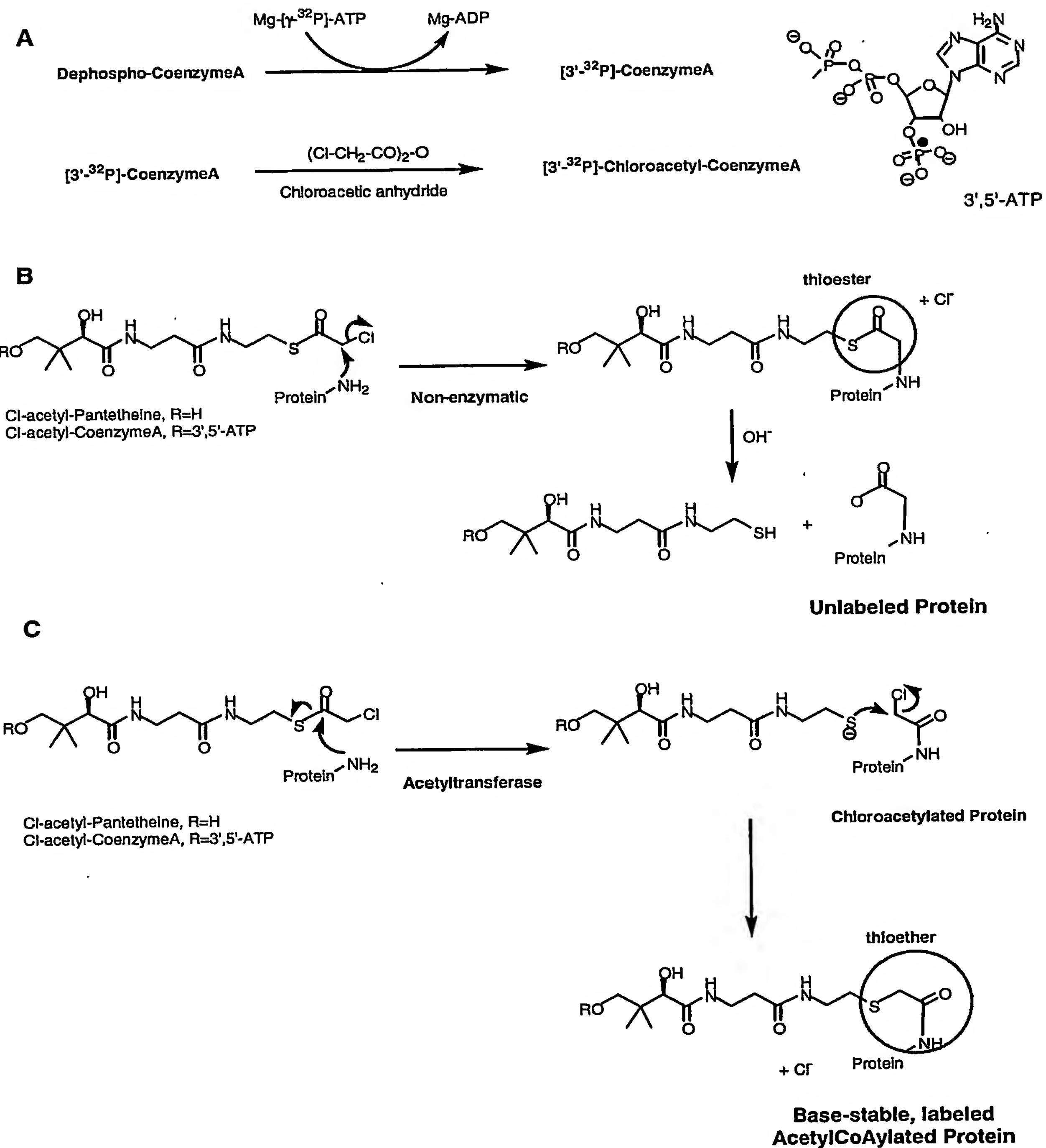
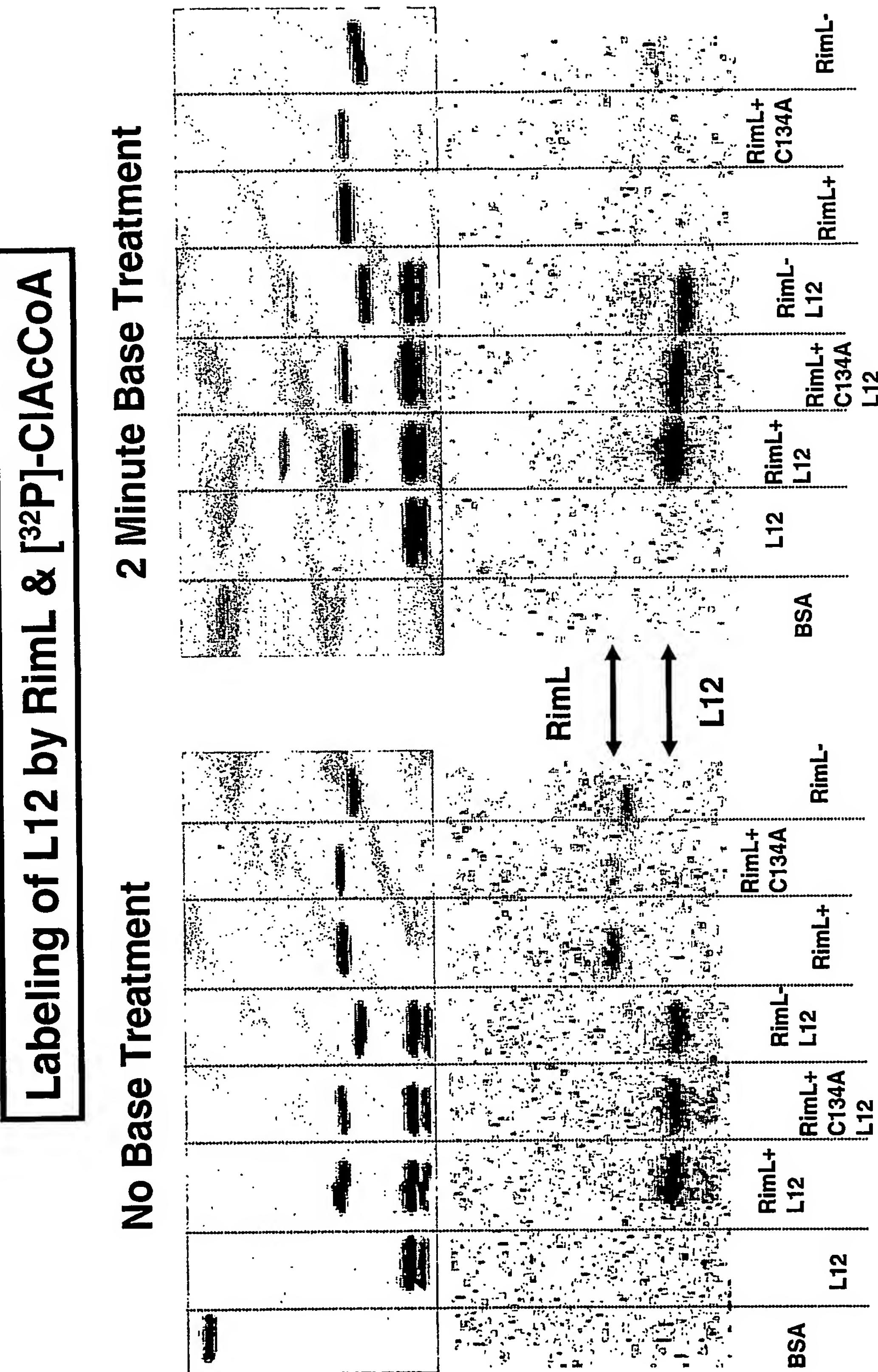


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FIG. 1



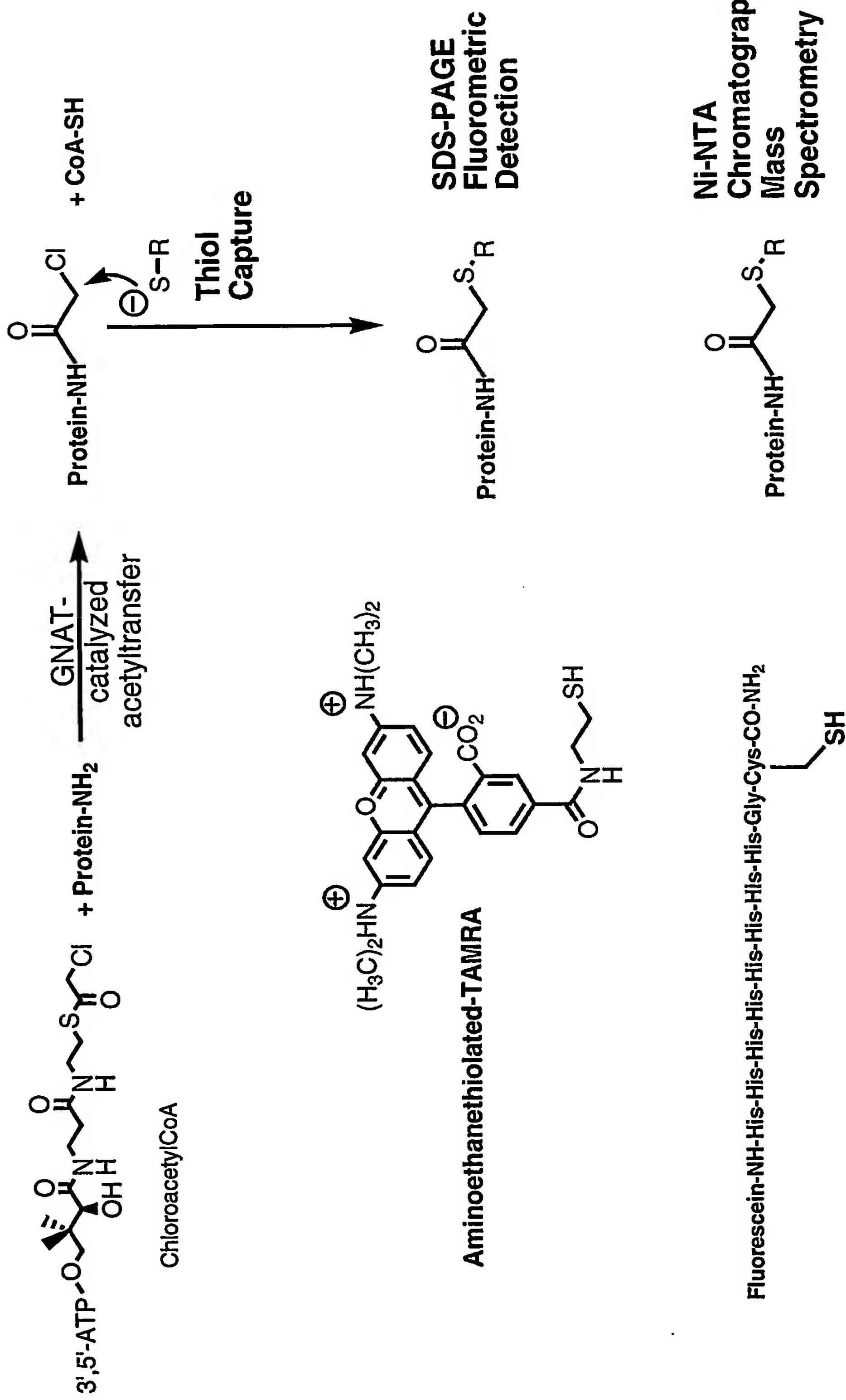
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FIG. 2



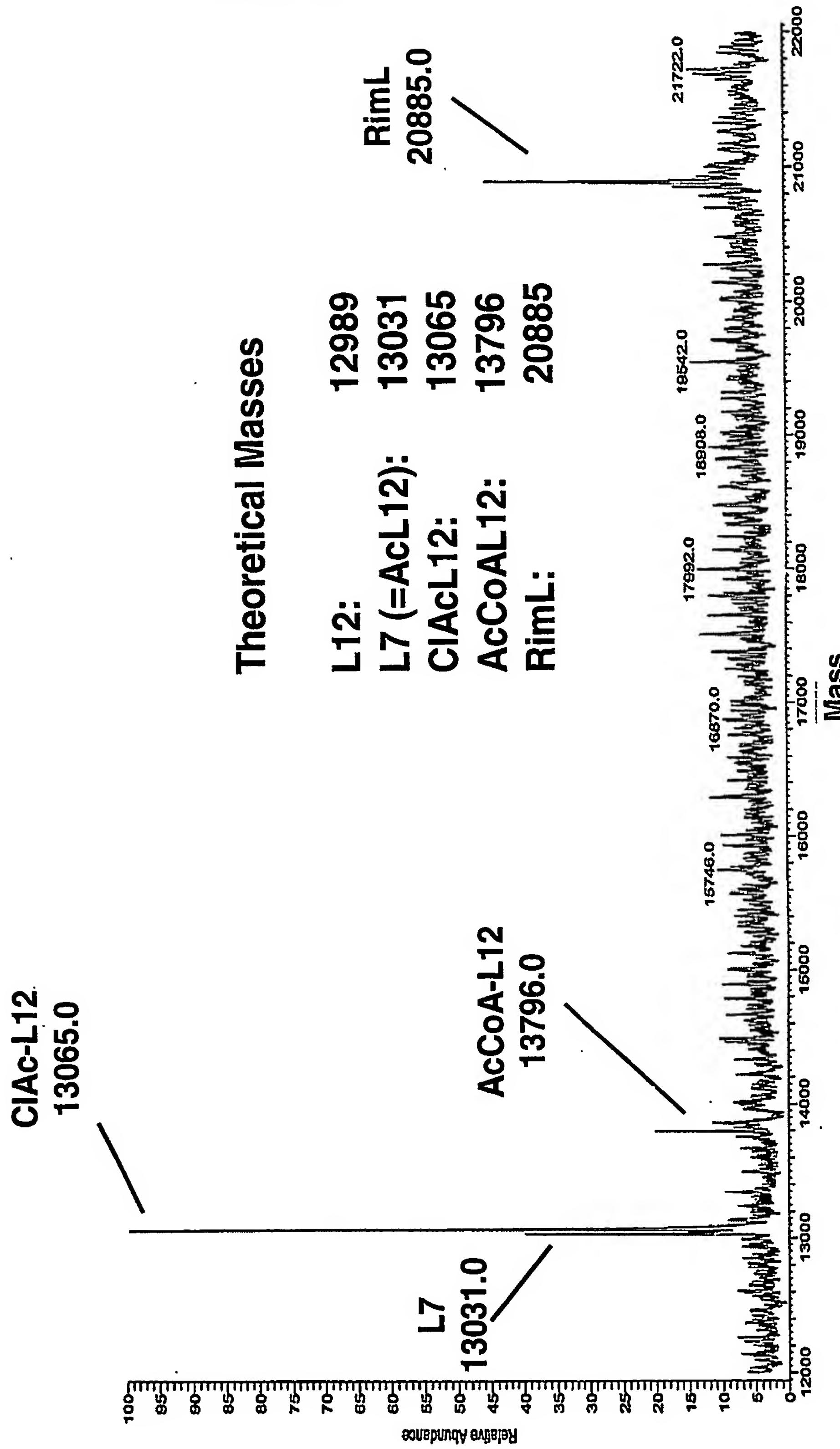
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FIG. 3

Proteome Profiling of GNAT Substrates



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FIG. 4

Mass Spectrometry of RimL-catalyzed AcetylCoAylation of L12

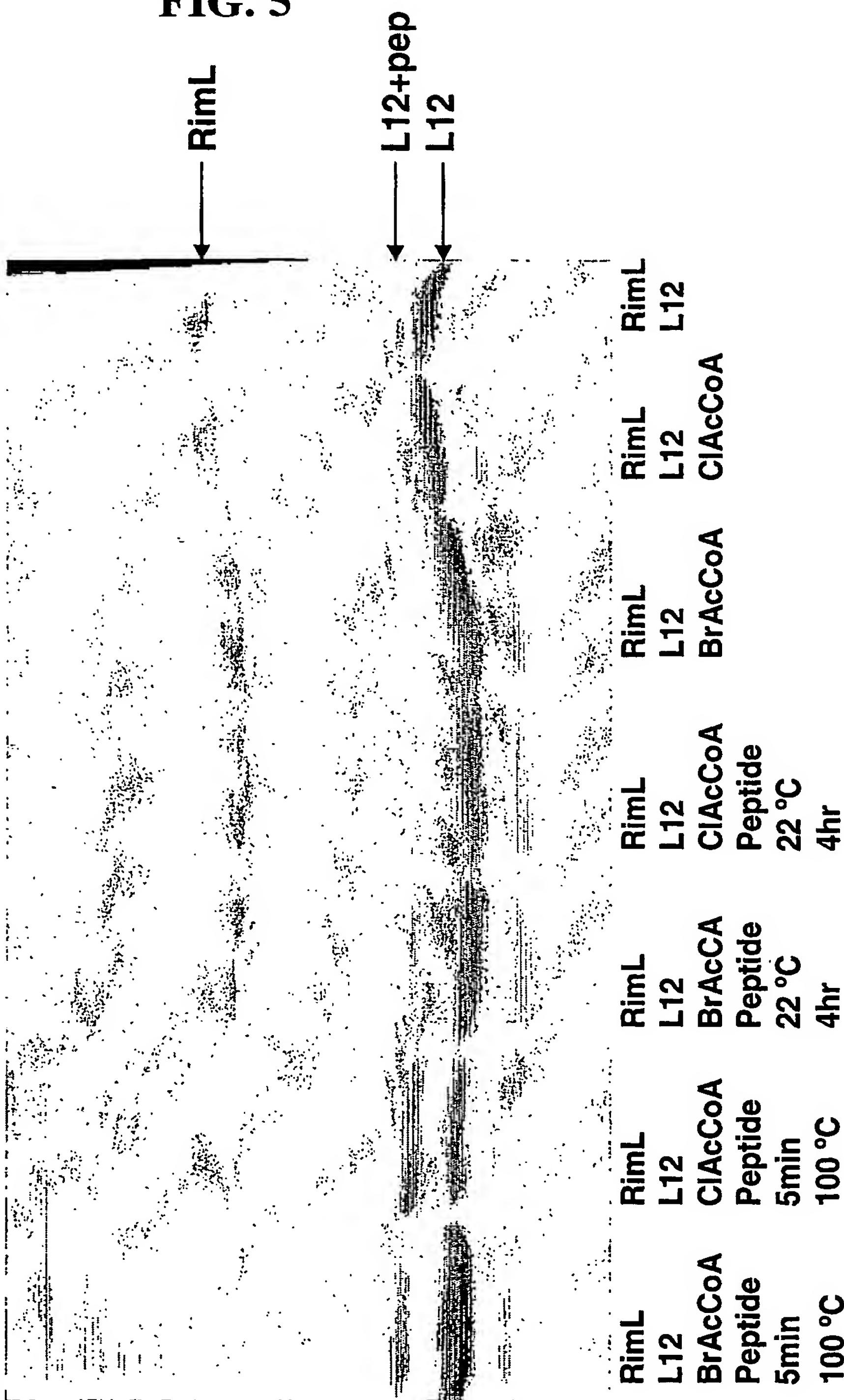


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FIG. 5

Affinity Labeling of Acetyltransferase Substrates

Cl-acetylation or Br-acetylation
50mM Tris, pH 7.5
RimL 2uM
L12 40 uM
ClAcCoA, BrAcCoA 250 uM
37°C for 1hr

Thiol capture peptide
100mM Tris, pH 8.5
1mM thiol peptide (HHHHHHGGC)
Different temperatures



Labeling of L12 in Crude Cell Extracts

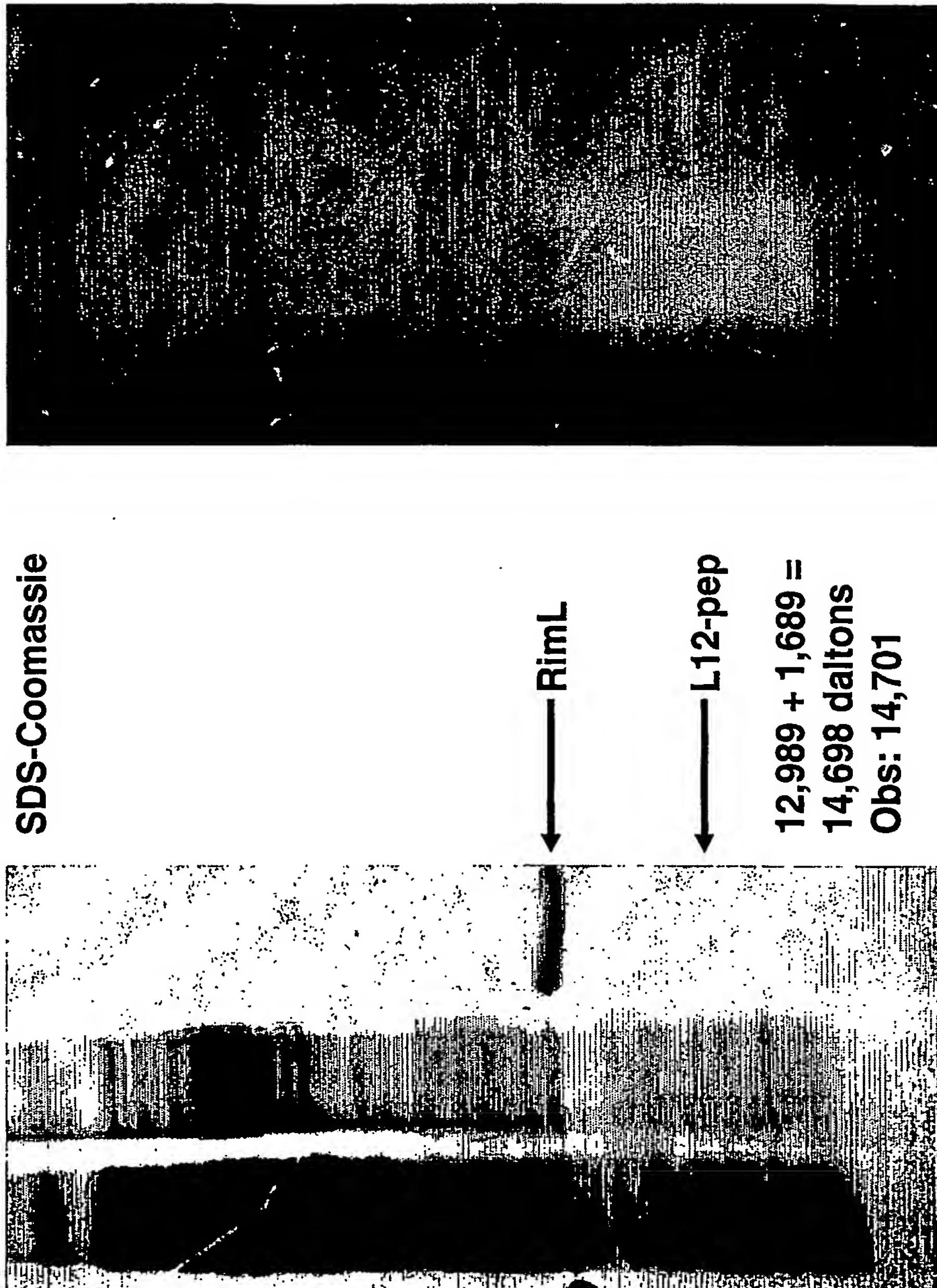
1: Crude cell lysate 2: Lysate + RimL + C1AccCoA + Fl-His8-Cys 3: 2 after Ni-NTA

1 2 3

SDS-Coomassie

Fluorometric
Scanning

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FIG. 6



$$12,989 + 1,689 = \\ 14,698 \text{ daltons}$$

Obs: 14,701

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FIG. 7

Chloroacetylation of histones by Hat1 Acetyltransferase

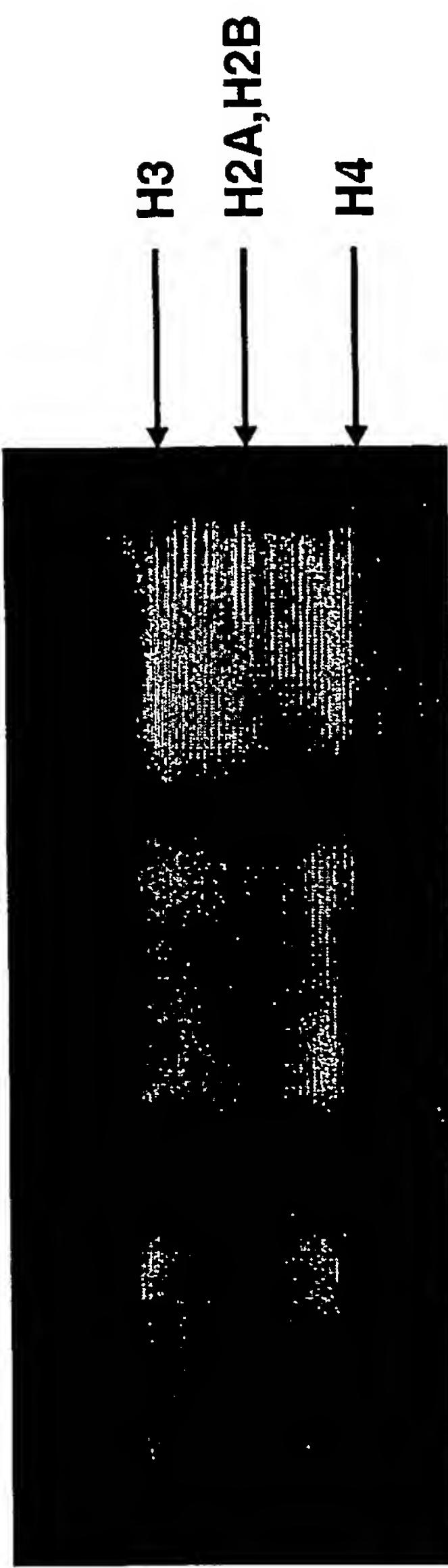
Comassie Staining



Thiol capture

50 mM Tris pH 7.3
200 μ M C1AcetylCoA
9 μ M histones (0.8 mg/ml)
0.4 μ M Hat1 (0.02mg/ml)

Fluorometric Detection



5 min 15 min 25 min